This listing of claims replaces without prejudice all prior versions and listings of claims in the application:

**Listing of Claims:**

1. (Previously Presented)  An image processing system for processing video content in a sequence of video frames and linking a pixel object embedded in said video content to data corresponding to the pixel object, the image processing system comprising:

a video capture system for capturing a frame of said sequence of video frames;

a user interface for enabling a user to select the pixel object in said captured frame, said video capture system determining a range of color values corresponding to the selected pixel object;

a pixel object tracking system configured to track the selected pixel object through a plurality of the sequence of video frames based on the determined range of color values;

a video linking system which generates a linked video file that is separate from and not embedded in said sequence of video frames, said linked video file comprising (i) a pixel object file identifying the selected pixel object by frame

2

number and location within the captured video frame and at least one subsequent video frame, and (ii) a separate data object file that includes information related to the object that corresponds to the selected pixel object, the data object file being linked to the corresponding pixel object file, wherein said linked video file is configured to be exportable to a media player so that a location in said sequence of video frames selected by a pointing device during playback of the video frames can be linked with the data object when said selected location corresponds to the selected pixel object; and

wherein said video linking system samples said video content at a sample rate which is a divisor of plural standard playback rates.


2. (Previously Presented) The system as recited in claim 1, wherein said video linking system samples said video content at a sample rate of a divisor of 30 frames per second and 12 frames per second.


3. (Previously Presented) The system as recited in claim 2, wherein said sample rate is at least 3 frames per second.

3

4. (Original) The system as recited in claim 1, wherein said video linking system is configured to identify segment breaks in said video content.

5. (Original). The system as recited in claim 4, wherein said segment breaks are determined by determining the median average pixel values for a series of frames and comparing changes in the pixel values relative to the median average and indicating a segment break when the change in pixel values represents at least a predetermined change relative to the median average.

Claims 6-10. (Cancelled)

11. (Previously Presented) The image processing system as recited in claim 1, further including a video playback application for playing back video content and said linked video file, wherein said video playback application is configured to (i) determine if locations selected by a pointing device during playback of the video content correspond to said selected pixel object and (ii) provide a link to a corresponding data object when said selected location corresponds to one of said selected pixel object.

4

Claim 12.    (Cancelled)


13.    (Previously Presented)  The system as recited in claim 1, wherein said video linking system samples said video content at a sample rate of a divisor of NTSC and PAL frame rates.


14.    (Previously Presented)  The system as recited in claim 1, wherein said video linking system samples said video content at a sample rate of a divisor of NTSC and 12 FPS frame rates.


15.    (Previously Presented)  The system as recited in claim 1, wherein said video linking system samples said video content at a sample rate of a divisor of NTSC, PAL, 15 FPS, and 12 FPS frame rates.


16.    (Previously Presented)  The system as recited in claim 1, wherein said video linking system samples said video content at a sample rate of a divisor of NTSC and movie frame rates.

17.    (Previously Presented)   The system as recited in claim 1, wherein said video linking system clusters the sampled video content with plural frames per cluster.

18.    (Previously Presented) The system as recited in claim 1, further comprising a pixel object tracking system which includes a processor which automatically tracks the selected pixel object in other frames, said pixel object tracking system including a system for automatically determining changes in the characteristics of said pixel object based upon changes in lighting and automatically compensating based upon those changes.

19.    (Previously Presented)    An image processing system for processing video content in a sequence of video frames and linking a pixel object embedded in said video content to data corresponding to the pixel object, the image processing system comprising:

a video capture system for capturing a sequence of video frames;

a user interface for enabling a user to select a pixel object in at least one of the captured frames, said video capture system determining a range of color values corresponding to the selected pixel object;

6

a pixel object tracking system configured to track the selected pixel object through a plurality of the sequence of video frames based on the determined range of color values;

a video linking system which generates a linked video file that is separate from and not embedded in said sequence of video frames, said linked video file comprising (i) a pixel object file which identifies, by frame number and location within the frame, the selected pixel object in the captured frame and at least one subsequent frame, and (ii) a separate data object file which includes data that corresponds to the selected pixel object, said linked video file being configured to be exportable to a media player, said video linking system sampling said video content at a sample rate which is a divisor of plural standard playback rates.

20.  (Previously Presented)  The system as recited in claim 19, wherein said video linking system samples said video content at a sample rate of a divisor of 30 frames per second and 12 frames per second.

21.  (Previously Presented)  The system as recited in claim 19, wherein said sample rate is at least 3 frames per second.

7

22.    (Previously Presented) The image processing system as recited in claim 19, further including a video playback application for playing back video content and said linked video file, wherein said video playback application is configured to (i) determine if a location selected by a pointing device during playback of the video content corresponds to the selected pixel object and (ii) provide a link to a data object in the data object file when said selected location corresponds to the selected pixel object.

23.    (Previously Presented) The system as recited in claim 19, wherein said video linking system samples said video content at a sample rate of a divisor of NTSC and PAL frame rates.

24.    (Previously Presented) The system as recited in claim 19, wherein said video linking system samples said video content at a sample rate of a divisor of NTSC and 12 FPS frame rates.

25.    (Previously Presented) The system as recited in claim 19, wherein said video linking system samples said video content at a sample rate of a divisor of NTSC, PAL, 15 FPS, and 12 FPS frame rates.

8

26.    (Previously Presented) The system as recited in claim 19, wherein said video linking system samples said video content at a sample rate of a divisor of NTSC and movie frame rates.

27.    (Previously Presented) The system as recited in claim 19, wherein said video linking system clusters the sampled video content with plural frames per cluster.

28.    (Previously Presented) The system as recited in claim 19, further comprising a pixel object tracking system which includes a processor which automatically tracks said selected pixel object in other frames, said pixel object tracking system including a system for automatically determining changes in the characteristics of said selected pixel object based upon changes in lighting and automatically compensating based upon those changes.

29.    (Previously Presented)   An image processing system for processing video content in a sequence of video frames and linking a pixel object embedded in said video content to corresponding data, the image processing system comprising:

9

a video capture system for capturing a sequence of video frames;

a user interface for enabling a user to select a pixel object in at least one of the captured frames, said video capture system determining a range of color values corresponding to the selected pixel object;

a pixel object tracking system configured to track the selected pixel object through a plurality of the sequence of video frames based on the determined range of color values;

a video linking system which generates a linked video file that is separate from and not embedded in said sequence of video frames, said linked video file comprising (i) a pixel object file which identifies, by frame number and location within the frame, the selected pixel object in the at least one captured frame and at least one subsequent frame, and (ii) a separate data object file, linked to the pixel object file, which includes data corresponding to the selected pixel object, said video linking system being configured to be exportable to a media player, said video linking system sampling said video content at a sample rate which is a divisor multiple of plural standard playback rates, said video linking system clustering the sampled video content with plural frames per cluster.

10

30.  (New)  The system as recited in Claim 1, wherein said video capture system determines the range of color values corresponding to the selected pixel object by (i) determining a mean of color values in pixels surrounding at least one pixel of the selected pixel object, and (ii) applying a predetermined color value range to the determined mean to provide said range of color values.

31.  (New)  The system as recited in Claim 1, wherein said video capture system determines the range of color values corresponding to the selected pixel object by:

(i) determining a value of at least one of (ia) a hue, and (ib) a color variable, of at least one pixel of the selected pixel object,

(ii) applying a predetermined value range to the determined value,

(iii) analyzing pixels that (iiia) fall within a predetermined distance of said at least one pixel of the selected pixel object, and (iiib) fall within the applied value range,

(iv) determining a further range of values based on the analyzed pixels, and

(v)   using the determined range of further values as said range of color values corresponding to the selected pixel object.

32.   (New)   The system as recited in Claim 19, wherein said video capture system determines the range of color values corresponding to the selected pixel object by (i) determining a mean of color values in pixels surrounding at least one pixel of the selected pixel object, and (ii) applying a predetermined range to the determined mean to provide said range of color values.

33.   (New)   The system as recited in Claim 19, wherein said video capture system determines the range of color values corresponding to the selected pixel object by:

(i) determining a value of at least one of (ia) a hue, and (ib) a color variable, of at least one pixel of the selected pixel object,

(ii)   applying  a  predetermined  value  range  to  the determined value,

(iii)  analyzing  pixels  that  (iiia)  fall  within  a predetermined  distance  of  said  at  least  one  pixel  of  the selected pixel object, and (iiib) fall within the applied value range,

12

(iv) determining a further range of values based on the analyzed pixels, and

(v) using the determined range of further values as said range of color values corresponding to the selected pixel object.

34. (New) The system as recited in Claim 29, wherein said video capture system determines the range of color values corresponding to the selected pixel object by (i) determining a mean of color values in pixels surrounding at least one pixel of the selected pixel object, and (ii) applying a predetermined range to the determined mean to provide said range of color values.

35. (New) The system as recited in Claim 29, wherein said video capture system determines the range of color values corresponding to the selected pixel object by:

(i) determining a value of at least one of (ia) a hue, and (ib) a color variable, of at least one pixel of the selected pixel object,

(ii) applying a predetermined value range to the determined value,

(iii) analyzing pixels that (iiia) fall within a predetermined distance of said at least one pixel of the

13

selected pixel object, and (iiib) fall within the applied value range,

       (iv) determining a further range of values based on the analyzed pixels, and

       (v) using the determined range of further values as said range of color values corresponding to the selected pixel object.